CONNECTICUT UNIFIED WATERSHED ASSESSMENT

October 1, 1998

The Connecticut Department of Environmental Protection (DEP) and the USDA Natural Resources Conservation Service (NRCS) have conducted a Unified Watershed Assessment for Connecticut pursuant to the Clean Water Action Plan. These assessments are the product of a compilation and review of available information on water quality conditions, land use conditions, natural resource conditions, and pollution sources. An extensive public participation program was conducted to reinforce the assessments with valuable local knowledge and critique. These Unified Watershed Assessments provide an excellent working framework to guide the future direction of resources to restore and protect Connecticut's watersheds.

Assessed Watersheds

Watersheds were delineated according to the hydrological hierarchy developed by the Connecticut DEP Natural Resources Center. For convenience of portraying the assessment information, Connecticut was divided into five large geographical areas along drainage basin boundaries (Figure 1) as follows:

Thames Basin Overview Area - Includes the Pawcatuck Major Basin, Southeast Coast Major Basin, and Thames Major Basin

Connecticut Basin Overview Area - Includes the Connecticut Major Basin

Central Coastal Basin Overview Area - Includes the South Central Coast Major Basin

Housatonic Basin Overview Area - Includes the Housatonic Major Basin and a small portion of the Hudson Major Basin

Western Coastal Basin Overview Area - Includes the Southwest Coast Major Basin and a small portion of the Hudson Major Basin

The Major Basins correspond approximately to the 8-digit Hydrologic Unit Code level employed by federal agencies. Within each Overview Area, the Major Basins are further subdivided into their respective Regional Basins. The Regional Basins correspond to 11-digit HUC watersheds. Within the Farmington Regional Basin, individual assessments were performed for the Pequabuck and Still River subregional watersheds. Also, individual assessments were performed for the small areas of the Hudson Major Basin which lie within Connecticut.

Major basins with significant land areas in Connecticut are markedly heterogeneous in character, and difficult to categorize into one particular assessment category. It was found that assessment information was sufficiently detailed to enable categorization at the Regional Basin level, or 11-digit HUC level. The Regional Basin was selected as the basic unit of assessment and

categorization. Regional Basin categorizations, and their geographic relationships to the 8-digit HUC basins, are presented in Figure 2 and in Table 1.

Assessment and Categorization

Connecticut's Unified Watershed Assessments consist of a compilation and review of available waterbody information and watershed information which has been organized in accordance with geographical watershed areas. This information is portrayed in matrix form and displayed on maps. The maps and matrices were reviewed by a team of DEP and NRCS staff, and the each Regional Basin was proposed as either a Category 1 "watershed in need of restoration" or a Category 2 "watershed meeting goals". Following an extensive public participation effort, public comments were incorporated into the assessment and the categorizations were finalized. The Basin Overview Area matrices and maps, with detailed descriptions of the information portrayed, are presented in the Appendix.

Public Participation

During August and September a series of briefings and public workshops were conducted to solicit comment on the draft assessment and proposed categorizations. DEP staff provided briefings for the DEP Interdepartment Rivers/Watershed Management Coordinating Committee and the Regional Planning Organization Directors. Another briefing for statewide conservation organizations, state agency staff, and federal agency staff was cosponsored by DEP, NRCS, EPA Region I, and Rivers Alliance of Connecticut.

Ten public workshops were held, two in each of the five basin overview areas. The workshops were cosponsored by DEP, NRCS, and local organizations. The announcement for the workshops, and the worksheet used for soliciting public comments, are presented as Exhibit 1 and Exhibit 2. The worksheet returns provided 86 specific comments about conditions in local waters and watersheds. These comments were added as additional entries in the Assessment Matrices. A large majority of the comments supported the proposed catergorizations.

Interstate Coordination

Coordination of watershed assessments and categorizations for interstate watersheds is being accomplished through participation in a forum established by the New England Interstate Water Pollution Control Commission. A Unified Watershed Assessment committee has met on two occasions, and plans a third meeting in November. The New England states and New York have shared their draft assessments, and are discussing differences in categorizations on shared waters. EPA Region I is also participating in these discussions. The differences between Connecticut's assessments and those of its neighboring states appear in general to be reconcilable.

Tribal Coordination

DEP Water Bureau staff met individually in September with the Mashantucket Pequots and the Mohegans to brief them on the draft assessments associated with their watershed lands. Both

tribes hold rather small areas of land in trust, and both have a strong environmental commitment. The tribal representatives expressed support for the Unified Watershed Assessment process. Both tribes were encouraged to provide comments on the draft assessments. A DEP file report of these meetings has been prepared.

Funding Priorities

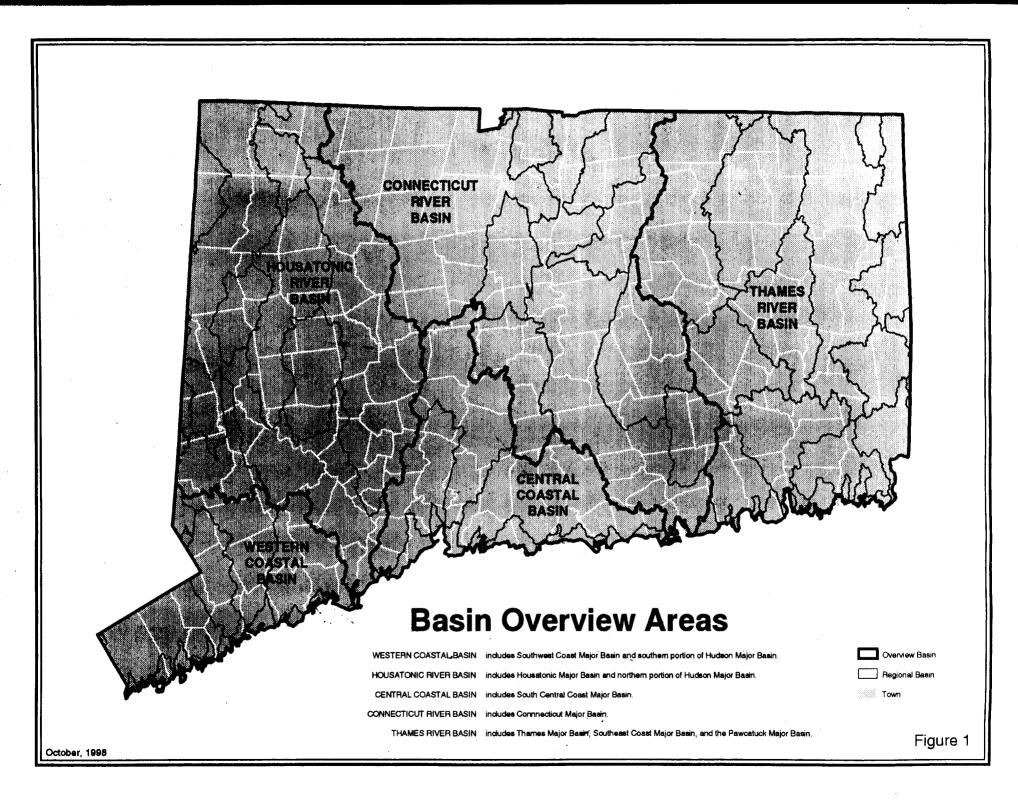
The Connecticut DEP has been using a mix of federal, state, and local funding sources to support watershed management efforts. The Unified Watershed Assessments will facilitate the targeting of watershed restoration funds that may become available under Section 319 of the Clean Water Act. These funds will be targeted by Connecticut DEP to Category 1 watersheds in accordance with three priorities:

- 1) watersheds with active multipartner management efforts underway
- 2) watersheds with waterbodies identified as high priority for development of Total Maximum Daily Load (TMDL) analyses pursuant to Connecticut's 303(d) list, when problems relate to watershed management needs
- 3) new restoration initiatives with substantial local support.

Active multipartner management efforts are currently underway for several Category 1 Regional Basins, including the Quinebaug River, Scantic River, Hockanum River, Mattabesset River, Quinnipiac River, Naugatuck River, and Norwalk River. Similar efforts are underway for several subregional watersheds located within Category 1 Regional Basins, including Fenger Brook (Southeast Shoreline), West River (South Central Western), and Sasco Brook (Southwest Eastern).

Regional basins associated with priority TMDL needs are the Thames Main Stem, Willimantic River, Shetucket River, Pequabuck River, South Central Complex, Housatonic Main Stem, and Still River. Subregional basins with priority TMDL needs, associated with Category 1 Regional Basins include Broad Brook (Scantic River), Batterson Park Pond (Park River), Beseck Lake (Mattabesset River), Hanover Pond (Quinnipiac River), Oyster River (Quinnipiac River), Housatonic Estuary (Housatonic River), Limekiln Brook (Still River), Transylvania Brook (Pomperaug River), Steele Brook and Mad River (Naugatuck River), Bridgeport Harbor and Black Rock Harbor (Southwest Shoreline), Sasco Brook (Southwest Eastern) and Stamford Harbor (Southwestern Regional).

New restoration initiatives may develop from locally led watershed management initiatives. An The Connecticut River Main Stem, which has received National Heritage River designation, is an example of a Category 1 Regional Basin which may result in new restoartion initiatives. Additional restoration initiatives are anticipated for Category 1 Regional Basins where NRCS cost share programs may assist in restoration of agricultural impacts. These basins include the Blackberry River, Hollenbeck River, and Ten Mile River.



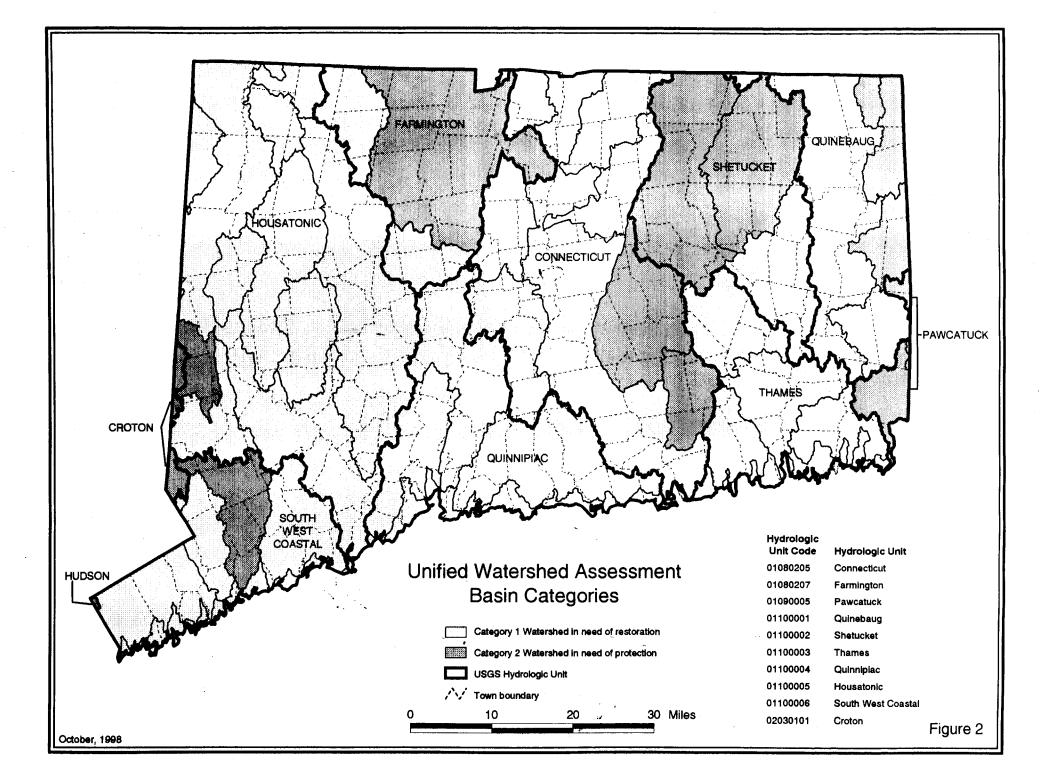


Table 1

USGS Hydrologic Unit Code and Corresponding Unified Watershed Assessment (UWA) Category

HYDROLOGIC UNIT CODE	MAJOR BASIN NUMBER	MAJOR BASIN	REGIONAL BASIN NUMBER	REGIONAL BASIN	UWA CATEGORY
01080205	4	CONNECTICUT	40	CONNECTICUT MAIN STEM	1
			41	STONY BROOK	1
			42	SCANTIC	1
			44	PARK	1
			45	HOCKANUM	1
			46	MATTABESSET	1
			47	SALMON	. 2
			48	EIGHTMILE	2
01080207	4	CONNECTICUT	43	FARMINGTON	2
			4303	STILL	1
			4315	PEQUABUCK	1
01090005	1	PAWCATUCK	10	PAWCATUCK MAIN STEM	2
			11	WOOD	2
01100001	3	THAMES	33	FRENCH	2
······································			34	FIVEMILE	2
	1		35	MOOSUP	2
			36	PACHAUG	1
			37	QUINEBAUG	1
01100002	3	THAMES	31	WILLIMANTIC '	2
			32	NATCHAUG	2
		•	38	SHETUCKET	1
01100003	2	SOUTHEAST COAST	20	SOUTHEAST SHORELINE	1
-			21 ′	SOUTHEAST EASTERN COMPLEX	1
			22	SOUTHEAST WESTERN COMPLEX	1
			30	THAMES MAIN STEM	I
			39	YANTIC	~ 1
01100004	5	SOUTH CENTRAL COAST	50	SOUTH CENTRAL SHORELINE	. 1
			51	SOUTH CENTRAL EASTERN COMPLEX	1
	1		52	QUINNIPIAC	1
			53	SOUTH CENTRAL WESTERN COMPLEX	1
01100005	6	HOUSATONIC	60	HOUSATONIC MAIN STEM	1
			61	BLACKBERRY	l l
		<i>;</i>	62	HOLLENBECK	1
			63	TENMILE	1
			64	CANDLEWOOD	2
			65	ASPETUCK	1
,			66	STILL	1
		ş	67 .	SHEPAUG	1
		/	68	POMPERAUG	1
	J	j	69	NAUGATUCK	1
01100006	7	SOUTHWEST COAST	70	SOUTHWEST SHORELINE	1
			71	SOUTHWEST EASTERN	1
		1	72	SAUGATUCK	2
•			73	NORWALK	1
			74	SOUTHWEST WESTERN COMPLEX	1
02030101	8	HUDSON	81	CROTON	2
02030102	8	HUDSON	80	HUDSON	2

Unified Watershed Assessment Workshop Dates and Locations

Thames River Watershed (includes Southeastern Coastal and the Pawtucket Watersheds)

- * September 8, 1998, 1:00 3:00 p.m., Southeastern Mental Health Authorty (Uncas on Thames), 401 West Thames Street, Building 301, Multi-purpose Room
- * September 10, 1998, 7:00 9:00 p.m., Brooklyn Agricultural Center

Sponsored by: Thames River Basin Partnership and Tolland (860) 875-3881, New London (860) 887-4163, and Windham (860) 774-8397, County Soil and Water Conservation Districts.

Connecticut River Watershed:

- * September 15, 1998, 1:00 3:00 p.m., Haddam Agricultural Extension Center, Annex
- * September 15, 1998, 7:00 9:00 p.m., Windsor Town Hall, Ludlow Room,

Sponsored by: Connecticut River Watershed Council (413)529-9500), the Connecticut River Watch (860) 345-9175 or 3219), and Hartford County Soil and Water Conservation District (860) 688-7725)

Housatonic Watershed (Includes northern portion of Hudson):

- * September 16, 1998, 3:00 5:00 p.m., Seymour Town Hall
- * September 23, 1998, 7:00 9:00 p.m., Connecticut Junior Republic, Route 63, Auditorium, Litchfield

Sponsored by: Housatonic Valley Association (860)672-6678), the Town of Seymour, and the Litchfield County (860)626-8258) and the New Haven County (203)269-7509) Soil and Water Conservation Districts.

South Central Coastal Watershed:

- * September 17, 1998, 1:00 3:00 p.m., Wallingford Town Hall, Council Chambers
- * September 17, 1998, 7:00 9:00 p.m., Schooner, Inc., 60 South Water Street, New Haven

Sponsored by: Save the Sound (203) 327-9786), Yale University (203) 432-3026), and the New Haven County Soil and Water Conservation District (203)269-7509).

Southwestern Coastal Watershed (Includes southern portion of Hudson):

- * September 22, 1998, 2:00 4:00 p.m., WestportTown Hall. Auditorium
- * September 22, 1998, 7:00 9:00 p.m., Save the Sound, Inc, 185 Magee Avenue, Stamford

Sponsored by: Save the Sound (203) 327-9786), The Town of Fairfield and the Fairfield County Soil and Water Conservation District (203) 744-6108)

Please telephone Workshop Sponsors for directions and, to review the Unified Water Watershed Assessment maps and matrix, or: DEP (860) 424-3020, NRCS (860) 487-4011



August 17, 1998 - Announcement of Public Workshops

Connecticut Unified Watershed Assessments

Your help is needed. Over the past 25 years the United States has made outstanding progress in reducing water pollution and restoring our rivers, lakes, and coastal waters. In many communities, restoration of water quality has had dramatic environmental, recreational, and economic benefits. Despite this progress, serious problems persist. States report that about 40 percent of the waters they assessed do not meet water quality goals and about half the nation's major watersheds (more than 2,000) have moderate to serious water quality problems.

The national Clean Water Action Plan, dated February 14, 1998, provides a blueprint for restoring and protecting the nation's water resources. This Action Plan proposes aggressive new actions to strengthen the program. A key element in the Action Plan is a new cooperative approach to watershed protection in which state, federal and local governments, and the public first identify the watersheds with the most critical water quality problems and then work together to focus resources and implement effective strategies to solve those problems. Another key element is a recommendation to increase federal funding of programs that help address such problems.

The Action Plan requires development of State "Unified Watershed Assessments" which identify watersheds in need of restoration and protection. Watershed restoration needs are assigned priority use of new financial resources that may be available as a result the President's fiscal year 1999 budget and Congressional approval.

The Department of Environmental Protection (DEP), working with the US Department of Agriculture Natural Resource Conservation Service (NRCS) have drafted Connecticut's Unified Watershed Assessments. The assessments are very brief reports that summarize in matrix and map formats existing water quality and resource management information and then place watersheds into one of two categories:

- #1. watersheds in need of restoration; and
- #2. watersheds achieving goals, protection needed.

Public review is necessary and important. Local knowledge can fill the gaps which sometimes occur in state and federal information systems. With the assistance of local sponsor organizations, the DEP and the NRCS will convene a series of public workshops (see attached schedule) to receive comments on Connecticut's draft Unified Watershed Assessments. Please attend one of the public meetings and provide your knowledge of local conditions. Completion of the assessments is required by October 1, 1998.

The Assessments can be viewed at the offices of DEP, NRCS, and workshop sponsors. Please telephone to arrange for assessment reviews. Refer to the attachment for office telephone numbers.

APPENDIX TO CONNECTICUT UNIFIED WATERSHED ASSESSMENT

ASSESSMENT MATRICES AND MAPS

Assessment Matrix

An assessment matrix was prepared for each Basin Overview Area to relate assessment information with particular watersheds and associated waterbodies. Major and Regional Basins are listed in order in accordance with the numerical hierarchy developed by the DEP Natural Resources Center. Regional watershed areas which extend beyond the Connecticut state line are designated with a shaded background for the basin name. Within each Regional Basin, local basins are listed when pertinent assessment information exists. Local basin numbers ending with "E" are estuaries.

Following the listing of basins / waterbodies, the matrix presents columns representing sources providing watershed assessment information or waterbody assessment information. The information available for the listed waters is summarized by various notations entered into the body of the matrix. The columns, and associated entries, are as follows:

CT DEP 305(b) Use Attainment - This column presents waterbody assessment information provided by the Connecticut DEP Bureau of Water Management "1996 Water Quality Report to Congress" prepared pursuant to Section 305(b) of the federal Clean Water Act. This report assesses approximately 15% of the state's waters. Letter designations are: F, Uses Fully Supported; T, Uses Fully Supported but Threatened; P, Uses Partially Supported; N, Uses Not Supported. Numerical entries are linear miles for rivers and streams, and square miles for estuaries.

CT DEP 303(d) Impaired Waters - This column presents waterbody assessment information provided by Connecticut's list of impaired waters dated April 1, 1998 prepared pursuant to Section 303(d) of the federal Clean Water Act. Waterbodies on the list are identified by the entry of an "X" under third column. Waters on the 303(d) list due solely to fish passage obstructions are further identified with the entry of "FP" under the column entitled CT DEP Fish Habitat Impairment. Waters on the 303(d) list due to flow restrictions are further identified with the entry of "FR" under the column entitled CT DEP Fish Habitat Impairment. Four lakes on the 303(d) list with special fish consumption advisories due to elevated mercury levels are further identified with the entry "Hg" in the Fish Habitat Impairment column. Lakes and ponds on the 303(d) list due to eutrophication are further identified with the entry of an "E" in the column entitled Lake Water Quality.

CT DEP Fish Habitat Impairment - This column presents waterbody assessment information provided from three sources. The CT DEP Fisheries Division statewide stream survey data collected between 1988 and 1998 was reviewed by DEP fisheries staff to assess overall habitat conditions within the Regional Basins. The stream survey database includes information on fish

populations, invertebrate populations, physical habitat, water chemistry, and flow from over 4,000 sites on more than 800 streams. Regional Basins with a high incidence of impaired conditions are identified with the entry of an "X" in this column. The stream survey information was also used to identify waters where fisheries habitat is impaired by flow restritions. These waters are identified by the entry of "FR" in this column. Four lakes with special fish consumption advisories due to elevated mercury levels are identified with the entry "Hg" in this column. Waters on the 303(d) list due to fish passage obstructions and flow restrictions are identified with the entries of "FP" and "FR", respectively.

Lake Water Quality - This column presents waterbody assessment information provided from two sources. The CT DEP lake trophic classification inventory, prepared pursuant to Section 314 of the federal Clean Water Act, was used to assess water quality of public recreation lakes. Exceptionally high quality lakes (oligotrophic lakes) are identified with the entry of an "O" in this column. Lakes and ponds on the 303(d) list due to eutrophication are identified with the entry of an "E" in this column.

<u>Drinking Water Supply</u> - This column identifies drinking water reservoirs and other surface water diversions which are subject to drinking water source assessments pursuant to the 1996 Safe Drinking Water Act Amendments. These watersheds are identified with the entry of an "AA" in this column.

<u>CT DEP 319 Watershed Project</u> - This column identifies five Regional and two Subregional Watersheds which are the subject of comprehensive non point source pollution assessment and management activities funded pursuant to Section 319 of the federal Clean Water Act. These watersheds are identified with the entry of an "X" in this column.

CT DEP Land Use/Land Cover - This column presents watershed assessment information for Regional Basins based on CT DEP interpretations of statewide land use and land cover mapping prepared by the University of Connecticut in 1992. Regional Basins with greater than 10% agricultural land cover are identified with the entry "A" in this column. Regional Basins with greater than 15% urban land cover are identified with the entry "U" in this column. Regional Basins with greater than 80% "other" land cover are identified with the entry "O" in this column.

<u>DEP/EPA LISS Priority Watersheds</u> - This column identifies one Regional Watershed and nineteen Subregional Watersheds which have been targeted by the Long Island Sound Study for management attention. These watersheds are identified with the entry of an "X" in this column.

NRCS EQIP Area - This column identifies Regional Basins which have significant portions lying within USDA Natural Resource Conservation Service priority areas for the Environmental Quality Incentive Program. These watersheds are identified with the entry of an "X" in this column.

NRCS Agr. Nutrient Area - This column identifies Regional Basins identified by the USDA Natural Resource Conservation Service as areas where concentrations of animal agriculture may pose a threat to water quality, particularly with respect to nutrient runoff. These watersheds are

identified with the entry of an "X" in this column.

CT DEP Resource Protection - This column identifies Regional Basins which have significant portions lying within Connecticut Resource Protection Project Focus Areas, which are areas that have exceptional high natural resource value. These watershed are identified with the entry of an "X" in this column. These focus areas were selected by analyzing the statewide distribution of natural resources important to human and ecological health, and the statewide distribution of potential threats to natural resources.

<u>Ecological Significant Wetlands</u> - This column identifies Regional Basins which have "wetlands of special concern" based on ecological features as identified by Connecticut DEP Natural Resources Center and DEP Coastal Area Management, March 1988. These watersheds are identified with the entry of an "W" in this column.

<u>EPA CWA UWA CATEGORY</u> - This column presents the results of the Unified Watershed Assessment for the Regional Basin by identifying the appropriate watershed category in accordance with EPA guidance. A Category I Watershed is a watershed in need of restoration. A Category II Watershed is a watershed meeting goals, including those needing action to sustain water quality.

Notes - Agency staff comments were added to this column, primarily to clarify or highlight important assessment information for specific waterbodies. Comments received during the public workshops on specific waterbodies are noted in this column preceded by the notation "PWC". A total of 86 specific comments were added to the matrix as public comments.

Assessment Maps

A series of six assessment maps depicting the information shown in the matrix was prepared for each Basin Overview Area. Each map shows the Basin Overview Area and the regional basins within the area. Basins that extend beyond the Connecticut state line are shown as far as information was available. The information from the matrix were combined into map themes which were compatible. The maps and their contents are as follows:

<u>Regional Basins</u> - This map shows the regional basins within each overview area as delineated by the DEP Natural Resource Center. The name and basin number for each basin are shown along with a small inset map to show the location of the overview are within the state.

<u>Clean Water Act 305b & 303d Waters</u> - This map shows two types of water bodies. All of the water bodies assessed for the 305(b) Use Attainment are shown with no indication of their assessed level of use attainment. The water bodies considered impaired under the 303(d) are also shown without indication of the nature of their impairment.

<u>Water Quality Classifications</u> - This map shows the CT DEP classification of surface and ground water. The classifications for each major basin are updated on a rotating basis and the Housatonic and Southwest Major basin were updated most recently.

<u>Priority Watersheds</u> shows watersheds targeted for attention by the CT DEP 319 Program and the DEP/EPA LISS Program. All areas within the boundary of the Basin Overview Area are shown and areas of overlap are identified.

<u>Land Use /Land Cover</u> - This map shows the 1992 land use/land cover for each basin. Four categories of land use/land cover are shown; agriculture, urban, water, and all other categories.

<u>Environmental Focus Areas</u> - This map combines three columns form the matrix: CT DEP Resource Protection Areas, NRCS EQIP Areas, and Ecological Significant Wetlands. All of these areas within the boundaries of the Basin Overview Area are shown.

Table 2. Unified Watershed Assessment Category Designation - Background Information

HUC CODE	Waterbody ID	Waterbody Name	303(d) Water	305(b) River (%)	305(b) Lake (%)	Local Group	Flow Altered	Exotic Species Altered	VT Ag BMP Rank & NRCS EQIP	NRCS 83-566	UWA Cat 1 '99, '00	UWA Cat I long term rank	UWA Cat 2 Threat	Thrt ORW or Cls 1 Wetland	UWA Cat 3 Sensitive Natural Waters	UWA Cat 4 Assmt Water
			M		•	•										
01080101									3			М	И		х	Х
01080101	16-01	Upper Connecticut River		0	0	х										
01080101	16-02	Lower Upper Connecticut River		0		х							х			
01080101	16-03	Northern Connecticut River		0		х										
01080101	16-04	Moore Impoundment		100		х	2				х					Н
01080101	16-05	Comerford Impoundment		100	0	х	2				х					Н
01080101	16-06	Mid-Northern Connecticut River		70		х	2				Х		<u> </u>	<u></u>		н
01080101	16-07	Lower Northern Connecticut River		100	0	Х	2				х			<u> </u>		Н
01080101	16-08	Canaan Direct Tributaries		8	90					<u> </u>			<u> </u>			
01080101	16-09	Lemington - Bloomfield Direct Tributaries		. 0	0							<u> </u>	!			<u> </u>
01080101	16-10	East Branch - Nulhegan River		31		<u> </u>						<u> </u>	1			
01080101	16-11	Nulhegan River	· x	7	0							н			х	
01080101	16-12	Wheeler Stream		0	0							<u> </u>	<u> </u>			
01080101	16-13	Paul Stream		0	92								<u> </u>		X	<u></u>
01080101	16-14	Maidstone - Guildhall Direct Drainage	<u> </u>	4	0											
01080101	16-15	Guildhall - Lunenburg Direct Drainage		0	0								<u> </u>			
01080101	16-16	Concord Direct Drainage		0	6						<u> </u>					
01080101	16-17	Waterford Direct drainage		0												
01080101	16-18	Barnet- Ryegate Direct Drainage		0	4											
01080102									3			М	N .	ļ	х	Х
01080102	15-01	Passumpsic River Mainstem	Х	91		х					X	М]			х

HUC CODE	Waterbody ID	Waterbody Name	303(d) Water	305(h) River (°6)	305(b) Lake (%)	Local Group	Flow Altered	Exotic Species Altered	VT Ag BMP Rank & NRCS EQIP	NRCS 83-566	UWA Cat I '99, '00	UWA Cat I long term rank	UWA Cat 2 Threat	Thrt ORW or Cls 1 Wetland	UWA Cat 3 Sensitive Natural Waters	UWA Cat 4 Assmt Water
01080102	15-02	Joe's Brook		25	0		х					М			х	
01080102	15-03	Lower Tributaries - Passumpsic River		0				<u> </u>		<u> </u>						-
01080102	15-04	Sleepers River	х	23								Н				х
01080102	15-05	Upper Tributaries - Passumpsic River		0	24											х
01080102	15-06	Miller's Run		0	0	х										
01080102	15-07	West Branch Passumpsic River		0	2	х									х	
01080102	15-08	East Branch Passumpsic River		22	7	х										
01080102	15-09	Moose River	X,2	19	0						х	Н	х		х	
01080103									3			М	N	1	х	х
01080103	14-01	Lower Ompompanoosuc River		43	0											
01080103	14-02	West Branch Ompompanoosuc River	Х	21	0							М	Х			х
01080103	14-03	Ompompanoosuc River	Х	11	0							М		х		
01080103	14-04	Lower Waits River		5			х					М				
01080103	14-05	Upper Waits River	х	0	100							М				
01080103	14-06	South Branch Waits River		0												
01080103	14-07	Lower Wells River	Х	2	0	Х						М		Ĭ		х
01080103	14-08	Upper Wells River		0	0											
01080103	14-09	Stevens River		2	0	Х										Х
01080104									3			М	N		х	X.
01080104	13-01	Upper Southern Connecticut River		100		х	х					М				х
01080104	13-02	Upper Mid-Southern Connecticut River		100		х	х	х				М				, X

HUC CODE	Waterbody ID	Waterbody Name	303(d) Water	305(h) River (%)	305(b) Lake (%)	Local Group	Flow Altered	Exotic Species Altered	VT Ag BMP Rank & NRCS EQIP	NRCS 83-566	UWA Cat 1 -99, '00	UWA Cat I long term rank	UWA - Cat 2 Threat	Thrt ORW or Cls 1 Wetland	UWA Cat 3 Sensitive Natural Waters	UWA Cat 4 Assmt Water
			N	T	r			T .	1	1			11	3 (T	7.
01080104	13-03	Mid-Southern Connecticut River	Х	100		Х	Х		ļ			М		 		Х
01080104	13-04	Vernon Impoundment		100		Х	Х				ļ	М]	ļ		х
01080104	13-05	Lower Connecticut River	<u> </u>	100		х	х					M	<u> </u>			Х
01080104	13-06	Hartford Direct Drainage		0	0								1			<u> </u>
01080104	13-07	Hartford-Windsor Direct Drainage		11	0											х
01080104	13-08	Reading-Windsor Direct Drainage		16	18		х	х				М			Х	х
01080104	13-09	Weathersfield-Springfield Direct Drainage		0	0											
01080104	13-10	Springfield-Rockingham Direct Drainage		0			х					М				
01080104	13-11	Westminster Direct Drainages		0	0											
01080104	13-12	Sacketts Brook	Х	16	0							H	1			
01080104	13-13	Dummerston Direct Drainage		0	0											
01080104	13-14	Whetstone Brook	х	23	0							Н				
01080104	13-15	Broad Brook		0	:											
01080104	16-19	Newbury Direct Drainage		9	0			х				L				1
01080104	16-20	Bradford-Fairlee-Thetford Direct Drainage		0	7			х				L				1
01080104	16-21	Norwich Direct Drainage		6	0											1
01080105									3	1	<u> </u>	м	н		х	Х
01080105 -	09-01	Lower White River Mainstern		0		х				[х	х
01080105	09-02	Middle White River Mainstern		0		х							1			1
01080105	09-03	Minor Tributaries - Lower White River Mainstem		3	0											
01080105	09-04	First Branch White River	X	5	0	х						М				1
01080105	09-05	Second Branch White River		35	15	х		ļ					Х	1		1

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01080105	09-06	Third Branch White River	х	13	0	х				х	х	М	х		х	х
01080105	09-07	Upper White River Watershed	x	0	0	х					х	М	х		х	
01080106									3			М	N		X	Х
01080106	10-01	Lower Ottauquechee River		33	0		х					М				х
01080106	10-02	Minor Tributaries - Lower Ottauquechee River		5	81		Х					М			х	
01080106	10-03	Mid-Ottauquechee River	X	100			Х					М				
01080106	10-04	Minor Tributaries - Mid-Ottauquechee River		18	0											
01080106	10-05	Upper Ottauquechee River		100			х					м		<u> </u>		
01080106	10-06	Minor Tributaries - Upper Ottauquechee River	х	52	1		Х					М				
01080106	10-07	Kedron Brook		22	0								<u> </u>	<u> </u>		
01080106	10-08	Broad Brook		11	0				<u> </u>					<u> </u>	x	<u> </u>
01080106	10-09	North Branch Ottauquechee River		1	<u> </u>					<u> </u>			<u> </u>	<u> </u>		<u> </u>
01080106	10-10	Barnard Brook		27	0		L						<u> </u>	<u> </u>		х
01080106	10-11	Lower Black River	х	30					<u> </u>		<u> </u>	М	<u> </u>			Х
01080106	10-12	Minor Tributaries - Lower Black River		74	0		<u> </u>						<u> </u>	1	<u> </u>	Х
01080106	10-13	Mid-Black River		47	0		х		<u> </u>			М			х	
01080106	10-14	Upper Black River	, х	10	0							М			х	х
01080106	10-15	Black River Headwaters		0	0	Х										
01080106	10-16	North Branch - Black River		26	0								Х		х	х
01080107									3			М	N		х	х

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								.					15			
01080107	11-01	Lower Williams River		0						<u> </u>						<u> </u>
01080107	11-02	Minor Tributaries - Lower Williams River		0	0								1	<u> </u>		1
01080107	11-03	Middle Branch - Williams River		7	0											
01080107	11-04	Upper Williams River		48	0											<u> </u>
01080107	11-05	Lower Saxtons River		78	0		Х					М				
01080107	11-06	Upper Saxtons River		24												
01080107	11-07	Lower West River .		0		х										Х
01080107	11-08	Minor Tributaries - Lower West River	Х	14	100		х					M				
01080107	11-09	Rock River		0	100											
01080107	11-10	Mid-West River	2	48	56	х	Х				х	M				
01080107	11-11	Grassy Brook		0	0											
01080107	11-12	Minor Tributaries - Mid-West River		0	0											
01080107	11-13	Cobb & Turkey Mountain Brooks		64	0	х									х	
01080107	11-14	Wardsbore Brook		58												
01080107	11-15	Ball Mountain Brook	2	45	33	х					х			Х	х	Х
01080107	11-16	Winhall River	х	36	0		х	Ŀ				М			х	
01080107	11-17	Upper West River		22		x							1			Х
01080107	11-18	Minor Tributaries - Upper West River	х	0	0	х	х					М			х	
01080201										91 26 2,		М	N		х	Х
01080201	13-16	Vernon Direct Drainages		0	0											
01080201	13-17	Massachusetts Direct Drainages		0	0											
01080203									3	T -		м	Н		х	

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												4			,	
01080203	12-01	Lower Deerfield River	х	0	()							М	1	<u> </u>		1
01080203	12-02	West Branch Deerfield River	X	0	17				l	<u> </u>		М			Х	
01080203	12-03	East Branch Deerfield River	Х	14	94							М	<u> </u>	<u> </u>	х	
01080203	12-04	Upper Deerfield River	Х	0	2					<u></u>	<u> </u>		<u> </u>	<u> </u>	Х	
01080203	12-05	North Branch Deerfield River	X	35	0		Х					М		<u> </u>	Х	
01080203	12-06	Green River		0	0	х										
01080203	12-07	East Branch North River	Х	1	0							М			х	<u> </u>
01110000									2			М	N			х
01110000	17-01	Lake Memphremagog Direct	х	65	93					х		М				Н
01110000	17-02	Tomifobia River	X	11	3							М	1			х
01110000	17-03	Coaticook River	Х	27	25		Х			1		М			х	
01110000	17-04	Lower Clyde River	х	15	0		Х			1		М				Н
01110000	17-05	Upper Clyde River		4	20	х	х			1		М		<u> </u>		┦
01110000	17-06	Willoughby River		2	95	х				1				<u> </u>	X	1
01110000	17-07	Lower Barton River		0	0					1			х		x	<u> </u>
01110000	17-08	Upper Barton River		0	0	х				1						х
01110000	17-09	Lower Black River		24	2					1						х
01110000	17-10	Upper Black River		17	31			х		1		L				х
02010001									1	.,		м	N		х	Х
02010001	02-01	Poultney Mainstern and Tribs		76	0	х				2				Х		
02010001	02-02	Hubbardton River		47	0	х	2	х			х	L			х	Х
02010001	02-03	Castleton River	2	0	0			x			х	L			х	

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-		P														
02010001	02-04	Upper Poultney Watershed	х	15		х				2		Н				
02010001	02-05	Mettawee River	2	23	0	х	х	х		2	х	М	х			х
02010001	04-01	Northern Section of Lower Champlain	2	43	32			х		1	Х	Н				
02010001	04-02	Middle Section of Lower Champlain	2	0	100			х		1	х	Н				Х
02010001	04-03	East Creek		16	0											
02010001	04-04	Southern Section of Lower Champlain		0	0					1			1			
02010002									1			Н	Н	1	х	х
02010002	03-01	Lower Otter Creek	х	86		Х	2			1	х	Н		1	х	
02010002	03-02	Minor Tribs - Lower Otter Creek		0	0					1	ļ		1	1		1
02010002	03-03	Mid-Mainstern Otter Creek		0		х				x	†			 		х
02010002	03-04	Tributaries to Mid Mainstern Otter Creek		33	0		X,2			x	х	м	 	┢──		
02010002	03-05	Upper Mainstern Otter Creek	Х	94	<u> </u>		х			х		Н		1		х
02010002	03-06	Tributaries to Upper Mainstern Otter Creek	х	60	0		х			x		М				Х
02010002	03-07	Little Otter Creek	Х	13	80			х				М	1	 		Х
02010002	03-08	Lewis Creek	х	28	65	Х		х		2		м	1	 	х	Х
02010002	03-09	Dead Creek	Х	25						1		М			x	
02010002	03-10	Lemon Fair River	Х	43	87			X		- 1		Н				
02010002	03-11	New Haven River	Х	2	0	х	х					Н	х	1	х	
02010002	03-12	Middlebury River	2	12	0	Х	х				x	м			x	х
02010002	03-13	Furnace Brook and Tributaries		0	0	х				<u> </u>				l	x	
02010002	03-14	East Creek		44	2	!	х					M		 	x	Х
02010002	03-15	Clarendon River	 	0	0		 	 		 			X	 	X	- X

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		7		•			,				,	1	,	· 		
02010002	03-16	Cold River		0	50				<u> </u>		ļ				х	▋
02010002	03-17	Mill River		13	0	х					ļ		<u> </u>		· x	1
02010002	03-18	Upper Otter Creek Watershed	х	0	0		Х					М	х		х	<u> </u>
02010003									1			Н	Н		х	Х
02010003	05-10	Burlington Direct Drainage	X.2	83	6	х		х			Х	, н				Х
02010003	05-11	Shelburne Bay Direct Drainage	. X,2	70	10	х		х			х	Н				1
02010003	05-12	Southern Main Lake Direct Drainage	Х	0	0							Н				
02010003	08-01	Lower Winooski River	Х	100	0	Х				1		М				х
02010003	08-02	Minor Tributaries to Lower Winooski	х	78	0					1		L				х
02010003	08-03	Lower Mid-Winooski River		100		х							х		Х	х
02010003	08-04	Minor Tributaries to Lower Mid-Winooski River	2	7	0		х				х	М				
02010003	08-05	Upper Mid-Winooski River	Х	100		х	X					М	х			
02010003	08-06	Minor Tributaries to Upper Mid-Winooski River		69			Х					М	х		х	х
02010003	08-07	Upper Winooski River	х	88		х	· X			х		Н	х			
02010003	08-08	Minor Tributaries to Upper Winooski River	х	31	0					х		Н	Х		х	
02010003	08-09	Winooski River Headwaters	Х	29	5	х	Х				Х	Н				
02010003	08-10	Huntington River		6	100	х				1	х		Х			
02010003	08-11	Lower Little River		45	12		2				X .				х	
02010003	08-12	Upper Little River	Х	29	0	х	х				х	М			х	Х
02010003	08-13	North Branch - Winooski River	Х	7	0										Х	
02010003	08-14	Kingsbury Branch		13	0											

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02010003	08-15	Jail Branch - Winooski River		26	0											
02010003	08-16	Stevens Branch - Winooski River	. X	23	3	X	х	х				Н				┸
02010003	08-17	Dog River	х	0	61	х						Н				Х
02010003	08-18	Mad River Mainstern	2	75		х					х				х	
02010003	08-19	Lower Mad River Tributaries	2	0	0	х					х				х	Х
02010003	08-20	Upper Mad River Tributaries	2	29	0	х	х				х	М			х	х
02010005									1			Н	Н		х	х
02010005	05-03	Alburg Drainage		0	0											
02010005	05-04	North Hero Drainage	2	0	69			х			х	Н				
02010005	05-05	Grand Isle Drainage		100												
02010005	05-06	Upper Northeast Arm Drainage		0											х	
02010005	05-07	St. Albans Bay Drainage	X,2	.67	0			х			х	Н	х			х
02010005	05-08	Lower Northeast Arm Drainage	Х	0	100							н		1		
02010005	05-09	Mailetts Bay Drainage	х	6	1			Х				Н			х	Х
02010005	07-01	Lower Lamoitle	Х	100	0	х	х			1		Н	х			
02010005	07-02	Lower Mid-Lamoille		100		х	Х					М	Х			Х
02010005	07-03	Minor Tributaries to Lower Mid-Lamoille	Х	0	0		х	х				н	х			
02010005	07-04	Upper Mid-Lamoille		98		х	Х					М	х	1		· X
02010005	07-05	Minor Tributaries - Upper Mid-Lamoille (A)		0	0					**						
02010005	07-06	Minor Tributaries - Upper Mid-Lamoille (B)		3	100		х					М	Х			
02010005	07-07	Upper Lamoille River		100	100	Х	х					М	Х			Х

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		<u> </u>	Ш	L	.	L										
02010005	07-08	Minor Tributaries to Upper Lamoille River		15	0		Х					М	X	.	X	
02010005	07-09	Mill River	х	0								Н	<u> </u>			
02010005	07-10	Lower Browns River	Х	40		х				l			х	<u></u>		<u> </u>
02010005	07-11	Upper Browns River		25	0	Х				1			Х	<u> </u>		<u></u>
02010005	07-12	Seymour River		0						1			х			<u> </u>
02010005	07-13	Brewster River	Х	88	50		х			1		н			X	Х
02010005	07-14	North Branch - Lamoille River		0	0					1			х			<u> </u>
02010005	07-15	Gihon River		7	0		х					М	х	 		
02010005	07-16	Kenfield Brook		1							<u> </u>		<u> </u>			<u> </u>
02010005	07-17	Ryder Brook		32	0							<u> </u>				L
02010005	07-18	Green River		0	0									 	ļ	_
02010005	07-19	Wild Branch		74	0					<u></u>	Х		Х	<u> </u>	L	Х
02010005	07-20	Elmore Branch		100	0				<u> </u>	<u> </u>			<u> </u>	<u> </u>		
02010005	07-21	Lower Headwaters Lamoille River		37	0		х		<u> </u>			М		 		_
02010005	07-22	Upper Headwaters - Lamoille River		30	0	х						<u> </u>	<u> </u>			X
02010007									1			Н	Н		X	<u> </u>
02010007	05-01	Rock River	2	9	0			x			х	Н	<u> </u>	1		X
02010007	05-02	Pike River	Х	0	94	х							1			Х
02010007	06-01	Lower Missisquoi River	Х	51		х				Χ		М	х	 		X
02010007	06-02	Mid-Missisquoi River		9		х	х					М	Х	1	ļ	<u> </u>
02010007	06-03	Minor Tributaries - Lower Missisquoi River		3	0								x		Χ.	<u> </u>
02010007	06-04	Minor Tributaries - Mid-Missisquoi River	х	12		х	х					М	х	JL		<u> </u>

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														•		
02010007	06-05	Black Creek	Х	27	1	х		Х				Н	х	<u> </u>		Х
02010007	06-06	Tyler Branch	Х	8	100	х						Н	Х			Х
02010007	06-07	Trout River .		13		х					х		х		x	
02010007	06-08	Upper Missisquoi River		11	0	х	х					М	Х			Х
02020003									4			М	И		х	Х
02020003	01-01	North Branch Hoosic		0												
02020003	01-02	Hoosic River	Х	100		х	Х					М		l		Х
02020003	01-03	Walloomsac River		3	3	х	х	х				М			х	
02020003	01-04	Batten Kill Mainstem		2		х								Х		Х
02020003	01-05	Mainstern Tribs - Batten Kill	X	1	0							М		Х	х	
02020003	01-06	Roaring Branch	Х	0	5							М			х	